

Exhibit A

中国精密机械进出口总公司
CHINA NATIONAL PRECISION MACHINERY I/E CORP.



U.S. MARSHAL SERVICE

DEPARTMENT OF JUSTICE

QW-1 MISSILE WEAPON SYSTEM

The QW-1 missile weapon system is a portable shoulder-fired, anti-aircraft weapon system against low and very low altitude targets by sudden attack in all directions. The target could be a high speed jet plane, a propeller-driven aircraft or an armed helicopter. It is a powerful weapon for air defense of pivotal points and covering field troops operation. The QW-1 missile weapon system has been improved remarkably in fast reaction, attacking mode, guidance system, propulsion system, etc., while still retaining the main characteristics of previous portable anti-aircraft missiles, such as flexibility, maneuverability, easy operation and fire-and-forget homing. This missile weapon system, with excellent technical efficiency and combat performance, meets the needs of modern wars.

1. Leading features:

- . All-direction engagement
- . High reliability
- . Accurate guidance
- . High speed
- . Powerful lethal effect
- . Long storage life

- . Max. lethal slant distance: 5,000m
- . Min. lethal slant distance: 500m
- . Conversion time from marching to operation: 10s
- . Total weight of the weapon system: 16.5kg
- . Weight of warhead: 1.42kg
- . Length of missile-in-tube: 1,532mm
- . Operating temperature: -40--+60°C
- . Service life: 10 years



2. Composition

- . Missile in tube
- . Firing mechanism
- . Ground battery
- . Coolant gas cylinder unit

4. Technical performance of the missile

- . Diameter of the missile: 71mm
- . Length of the missile: 1,477mm
- . Weight of the missile: 10.36kg
- . Guidance system: IR homing
- . Guidance law: proportional guidance plus target adaptive guidance



- . Control system: self-spinning single-channel control
- . Velocity of the missile: 600m/s

3. Main tactical and technical performance

- . Target: helicopters, propeller-driven airplanes, jet aircraft
- . Max. lethal altitude: 4,000m
- . Min. lethal altitude: 30m



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO. 30, Haidian Nanlu, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891

FAX: (8610) 68748844

http://www.cpniec.com.cn

CPMIEC

CPMIEC



FM-90 MISSILE WEAPON SYSTEM

The FM-90 is a powerful missile weapon system against various air threats in low and very-low altitude. It has strong fire-power to intercept fixed wing aircrafts, helicopters, cruise missiles, air-to-ground missiles and anti-radiation missiles.

1. Leading features

- Strong fire-power against massive attack
- Supper anti-jamming capability
- Multi-sensor engagement
- Sophisticated high performance missile
- Excellent very low altitude interception
- All-weather operation
- Performance improving based on serialization for potential threats

2. Main tactical and technical specifications

- Operational range:
 - 700~7,000m (against 600m/s AGM)
 - 700~11,000m (against 300m/s CM)
 - 700~12,000m (against aircraft)
 - 700~15,000m (against helicopter)
- Operational altitude:
 - 30~3,000m (against 600m/s AGM)
 - 30~6,000m (against 300m/s CM)
 - 30~6,000m (against aircraft and helicopter)
- Single shot kill probability:
 - ≥85%
- Max detection range:
 - 20Km($\sigma=0.1m^2$)
 - 18Km($\sigma=0.1m^2$)
- Max tracking range:
 - 48
- Simultaneous target detection quantity:
 - 24
- Simultaneous target tracking quantity:
 - 7
- Fire channel quantity:
 - ≤10.5s (6.5s for emergency)
- System reaction time:
 - 930m/s
- Max missile speed:
 - 35g
- Max maneuverability:

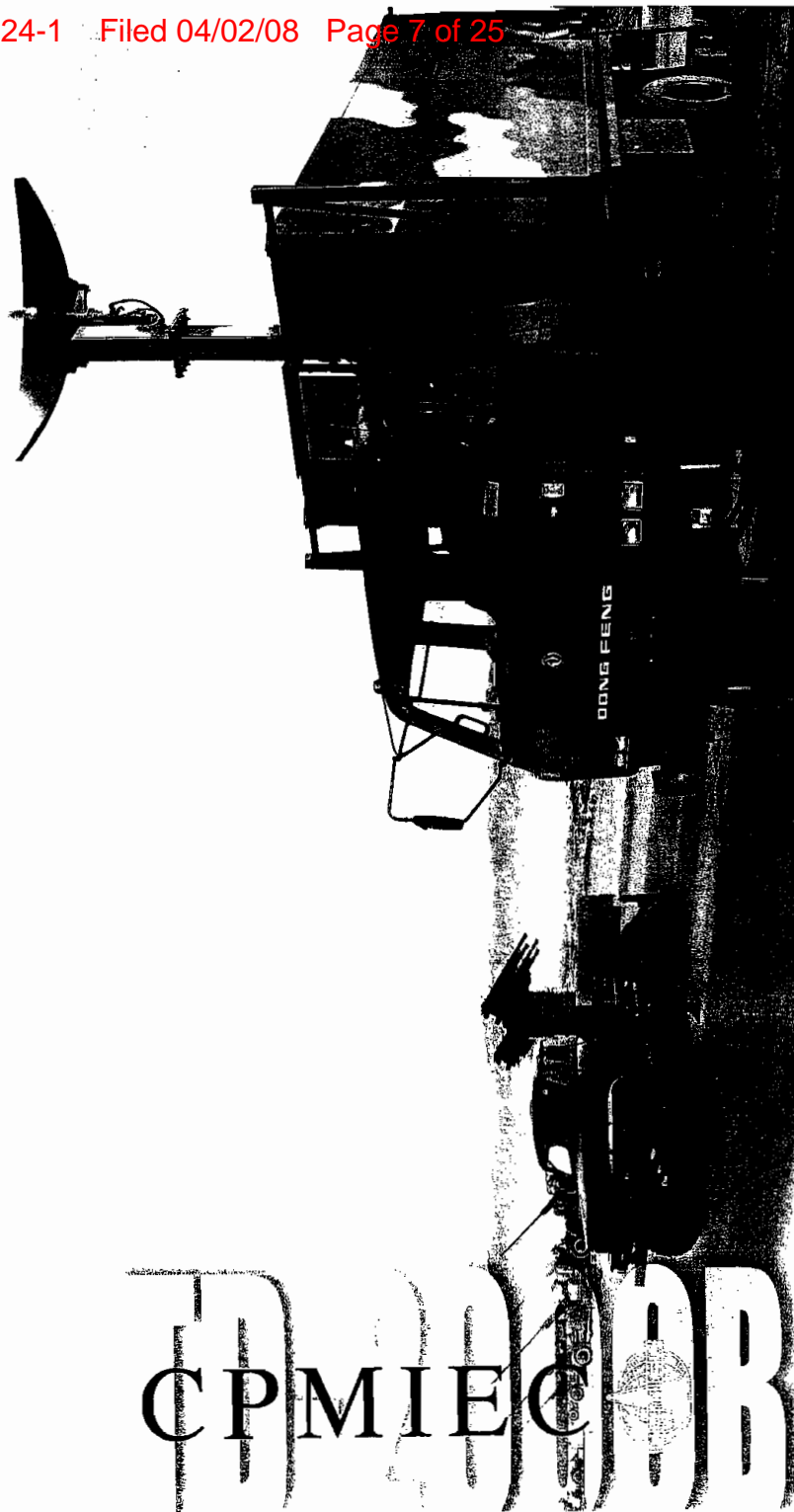
FM-90(N) is a ship-to-air missile weapon system for naval applications mounted on frigate and destroyer and is capable to intercept sea skimming anti-ship missile.



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION
ADD: NO.30, Haidian Nanlu, Beijing, 100080, China
TEL: (8610) 68748877 68748894 68748891 FAX: (8610) 68748844 <http://www.cpmiec.com.cn>

FD-200B

CPMIEC



TD-2000B MISSILE-GUN INTEGRATED WEAPON SYSTEM

The TD-2000B missile-gun integrated weapon system is a low and very low altitude air defense weapon system, which is integrated by the QW series (MANPADs), 57mm gun and fire control & command vehicles, etc. TD-2000B can deal with low and very low altitude incoming targets, such as subsonic cruise missiles, fighters, bombers, armed helicopters and UAVs, etc.

The TD-2000B weapon system is an automatic controlled system that improves the capabilities of individual weapon system and enhances the performance of whole weapon system. The system has different kinds of detection and tracking means such as radar, laser, optoelectronic and IR etc., which makes it possible to operate under the conditions of day and night, complex weather and strong electronic jamming.

1. Leading features

- Fast reaction
- High reliability
- Good maneuverability
- Excellent flexibility
- High effectiveness and low cost

2. Main tactical and technical performance

- Detection airspace
 - ▣ Target designation radar 240km
 - ▣ Optoelectronic tracker
 - Detection range: 29 ~ 15km
 - Tracking range: 27 ~ 15km
 - Operational range: 500 ~ 6,000m
 - Operational altitude: 30 ~ 4,000m
 - Reliability and maintainability
 - ▣ MTBF ≥100h
 - ▣ MTBCF ≥250h
 - ▣ MTTR 50.5h
 - Operation temperature: -40°C ~ 50°C
- ### 3. System composition
- Target designation radar: 1
 - LD fire control command vehicle: 1
 - LD missile launching vehicle (Octuple): 1 ~ 2
 - 57mm gun: 6



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO. 30, Haidian Nanti, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891

FAX: (8610) 68748844

http://www.cpmiec.com.cn



FN-6 MISSILE WEAPON SYSTEM

Adopted advanced four-element mid-infrared detector and pulse tracking system and up-to-date digital technology, FN-6 missile weapon system is a new generation of MANPAD. It characterizes easy operation, effective interception, fire-and-forget and compatible with multi-launching platforms. It also features excellent anti-jamming capability against background interference and infrared decoys. The FN-6 missile is engaged with a versatile application prospectively by mounting on vehicles, small vessels or helicopters in different configurations. The FN-6 missile weapon system is mainly employed in army divisions or regiments to undertake air defense for forward field and rear vital place and provide covering & protection for the marching troops.



3. Composition

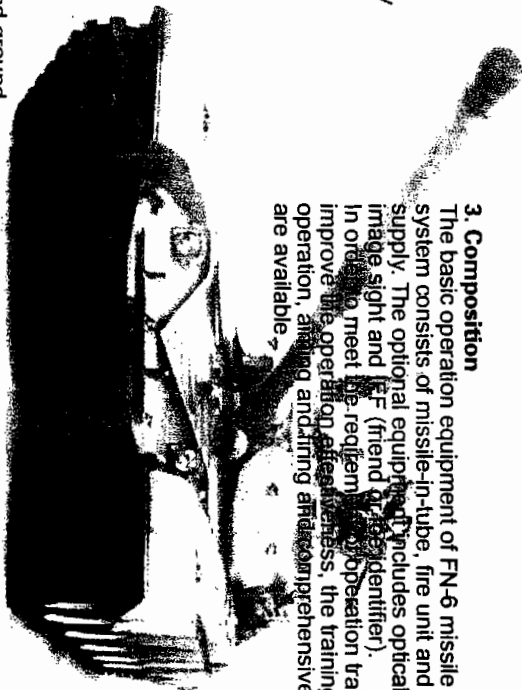
The basic operation equipment of FN-6 missile weapon system consists of missile-in-tube, fire unit and ground power supply. The optional equipment includes optical sight, IR image sight and IFF (friend or foe identifier). In order to meet the requirement of operation training and improve the operation effectiveness, the training devices of operation, aiming and firing and comprehensive test vehicle are available.

1. Leading features

- All-direction engagement
- High reliability
- Excellent anti-jamming capability
- Advanced guidance technology to enhance accuracy
- Powerful lethal effectiveness

2. Main tactical and technical performance

- Type of target: fighter, fighter-bomber, strike airplane, armed helicopter and other air targets
- Min. interception altitude: 15m
- Max. interception altitude: 3,800m
- Min. interception range: 500m (tail-on)
- Max. interception range: 800m (head-on)
- Missile length: 5,500m
- Missile diameter: 1,495mm
- Missile weight: 71mm
- Flight speed: 10.77Kg
- Max. maneuverability: >600m/s
- Combat reaction time: 18g
- Total weight of weapon system: <517Kg
- Anti-jamming capability: Resistance to background and ground object interference, Counter infrared decoy, Counter infrared modulation jamming
- Operational temperature: -40 ~ +50°C



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO. 30, Haidian Nanlu, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891 FAX: (8610) 68748844 <http://www.cpmiec.com.cn>



QW-2 MISSILE WEAPON SYSTEM

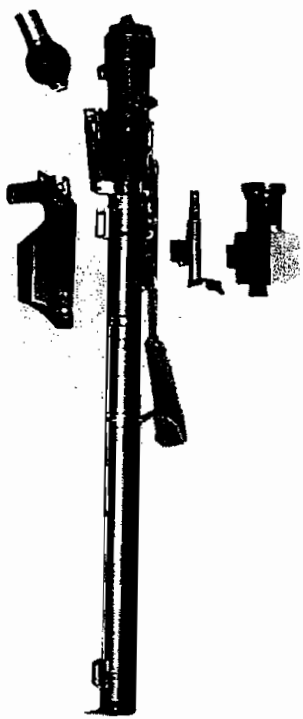
The QW-2 is a new generation of man-portable IR passive homing anti-aircraft missile weapon system. Which is used to intercept invading fighters, attackers, armed helicopter, unmanned reconnaissance aircraft and cruise missile at low and very low altitude to carry out field battle or critical area air defense. It has excellent detective capability, guidance accuracy, target destroying capability, night operation performance as well as very easy, simple and reliable operation advantage. The most outstanding is that the latest anti-infrared interference technology is applied to the system, therefore the missile can be used effectively against every kind of artificial IR jammers and IR flares in the course of firing and attacking.

1. Leading features

- Larger attacking zone
- Excellent anti-jamming ability
- Direct aiming and firing
- Effective initial guidance
- Fully new terminal guidance
- Accurate guidance
- Powerful lethality
- Firing motor left in tube
- Effective night operation
- Missile weight 11kg
- Missile length 1,590mm
- Missile diameter 72mm
- System weight 18.4kg
- Environment temperature -40~+55℃
- Service life 10 years
- Anti-jamming capability against background jamming against electromagnetic wave against artificial IR jammer against artificial IR flares against jamming actively against jamming in the whole procedure against jamming continuously against multiple flares

2. Main tactical and technical specifications

- Max. target speed 400m/s (head-on) 320m/s (tail-on)
- Target altitude 10~4,000m
- Target slant distance 500~6,000m
- Time ready to fire less than 5s
- Missile speed: more than 25m/s 600m/s(at endurance) 75%
- Single shot killing probability 16g(average) 18g(max.)
- Manouverable overload: 18g(max.)



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO.30, Haidian Nanlu, Beijing, 100080, China
 TEL: (8610) 68748877 68748894 68748891 FAX: (8610) 68748844 <http://www.cpmiec.com.cn>

FL-2000

FL-2000
CPMIEC



FL-2000 AIR DEFENSE MISSILE WEAPON SYSTEM

The FL-2000 weapon system is a short-range vehicular low and very low altitude air defense missile weapon system. It can effectively counter the targets such as aircraft, armed helicopter, unmanned aerial vehicle and cruise missile.

With strong maneuverability, FL-2000 weapon system is not only used for the field air defense of army, but also used for the last interception in the air defense system to improve the operational capability and survival capability. Adopted with the passive optoelectronic tracker, the system can resist all electronic jamming and is applicable to operating under "electronic warfare" environment.

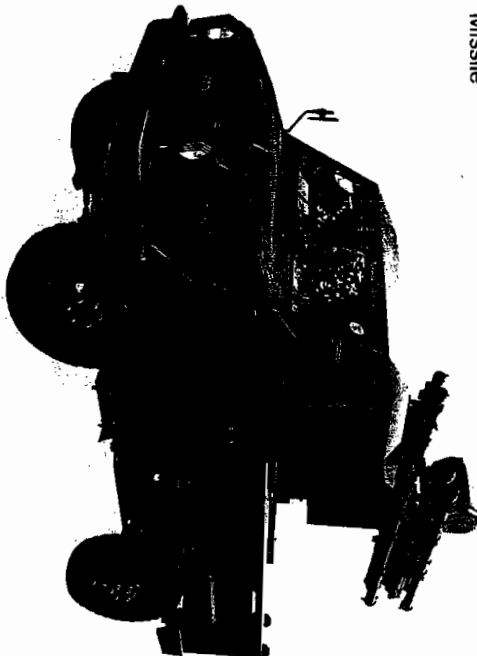
The FL-2000 weapon system is capable to integrate with antiaircraft gun into missile-gun system in order to perform integral command & control and possess high operational effectiveness.

1. Main tactical and technical specifications

	FL-2000(V1)	FL-2000(V2)
Type	Land based, mounted on armed vehicle	Land based, mounted on jeep or truck, passive combat
Compatibility	Various R homing missiles (MANPADS)	
Operational airspace	Depending on the R homing missiles	
Guidance system	Passive IR homing guidance	
Guidance mode	Proportional guidance law	
System reaction time	≤ 8 seconds	5 ~ 8 seconds
Launching mode	8 missile-in-container, oblique launching	
Radar detection range	18km ($\sigma = 1m^2$)	—
Tracking range of R tracker	13.5km	—
FOV of TV tracker	1.5° x 2.7°	—
Laser range finder	13.5km	—
Search airspace of R system	—	90° x 25°
Detection range of R system	—	10km
Operational temperature	-40 ~ +55°C	
Relative humidity	≤ 98% (20±5°C)	

2. Composition

- Target search system (search radar and/or IR search system)
- Optoelectronic tracking-illumination system
- Command and control system
- Launcher turret system
- Power supply and distribution system
- Vehicle system
- Missile



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO.30, Haidian Nanlu, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891

FAX: (8610) 68748844

http://www.cpmiec.com.cn



A100

CPM EIC

AI100 MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)

The AI100 MLRS is an advanced simple-controlled rocket system characterized by fast reaction, long range, high accuracy and high density fire-power. Its mission is to precisely attack and destroy enemy's group and area targets, such as military bases, massive armored troops, missile launching sites, large airports, important harbors and other important facilities.

1. Leading features of AI100 MLRS

- Fast reaction
- Long range
- High accuracy
- Concentrated firepower
- Different munitions
- GPS positioning and orientating
- High mobility
- Automatic measurement of ground meteorology

2. System composition

- Rockets
- Launching tube pack
- Launching truck
- Transport/loading trucks
- Command truck

3. System specifications

- Max. range: 80/90/120km
- Min. range: 40/45/60km
- Ground density at max. range: ≤1/300
- Weight of warhead: 200 kg
- Rockets per launcher: 10 rounds



- Salvo time of 10 rockets: 1 min.
- Preparation time: 8 min.
- Withdrawal time: 2 min.
- Re-load time: 20 min.
- Max. mobile range: 650 km
- Max. marching speed: 80 km/h
- Ambient temperature: -40~50°C
- Applicable altitude: ≤3,000m
- Shelf-life: 10 years

4. Launcher truck features

- Load capability: 22t
- Global positioning system and orientating system
- Self-positioning and self-orientating
- Automatic aiming, loading and launching.

5. Transporting/loading truck features

- Load capacity: 22t
- On-board hoist for the fast, automatic reloading
- Rockets inside the launch-tubes for storage and transportation
- Every three or four tubes compose one stack

6. Rocket features

- Diameter: 301mm
- Length: 7,300mm
- Total weight: 840kg
- Warhead weight: 200kg
- Standard munitions: anti-armor/anti-personnel cluster
- Other munitions available



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO. 30, Haidian Nanlu, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891 FAX: (8610) 68748844

http://www.cpmiec.com.cn

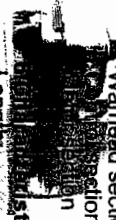
LY-50

LY-60
CPMIEC 

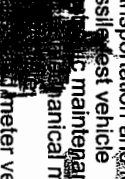
1. **Leading features**
2. Short reaction time
3. High guidance accuracy
4. High lethality
5. High reliability
6. Superior anti-jamming capability
7. Fast deployment
8. Easy maintenance with on-line
9. All-weather operation

[illegible]

- 5 Composition of the missile**
- Guidance section
 - Warhead section
 - Tail section
 - Launch section
- 6 Physical characteristics of the missile**
- Length: 3,896mm
 - Diameter: 208mm
 - Wing span: 680mm
 - Weight: 220kg
 - Max. speed: 3.0Ma
 - Max. maneuverability: 3.5g



5. Composition of the missile

- 
- ### 3. System composition
- One surveillance radar vehicle
 - Three tracking/illuminating radar vehicles
 - Six missile launching vehicles
 - One emergency power supply vehicle
- ### 4. Composition of technical support equipment
- Transportation and loading vehicle
 - Missile rest vehicle
 - Electrical maintenance vehicle
 - Mechanical maintenance vehicle
 - Meter vehicle
 - Power supply vehicle



4.Composition of technical support equipment



Key characteristics of the missile

- Length: 3.03m
- Diameter: 208mm
- Wing span: 680mm
- Weight: 220kg
- Max. speed: 3.0Ma
- Max. maneuverability: 35g



LY-60(N) is a ship-to-air missile weapon system for naval application.



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION
ADD: NO. 30, Haidian Nanlu, Beijing, 100080, China
TEL: (8610) 68748877 68748894 68748891 FAX: (8610) 68748844
<http://www.cpmiec.com.cn>

FILED

MIED



FT-2000 MISSILE WEAPON SYSTEM

The FT-2000 is a sophisticated surface-to-air, anti-radiation missile weapon system adopting passive detection and passive guidance to make multi-target engagement against various air radiations. Its mission is to intercept jamming planes, self-screening jamming planes and air radiation sources.

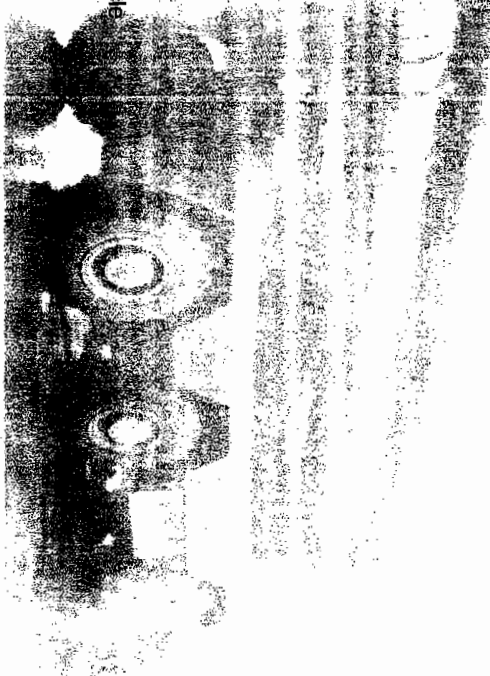
The FT-2000 can form an independent air-defense anti-radiation missile weapon system with its passive guidance stations and launching devices, or can be integrated with other air-defense missile weapon systems. The missile, with a wide beam seeker, can capture the target by itself, when necessary, and perform air-defense firing with a single launcher.

1. Leading features

- All air space coverage
- Applied for air-defense of field operation
- High reliability and mobility
- Super anti-jamming capability
- Excellent guidance system and multi-target capability

2. Main tactical and technical specifications

- Operational range: 12~100km
- Operational altitude: 3~20km
- Missile weight: 1,300kg
- Missile length: 6.8m
- Missile diameter: 466mm
- Operation band of seeker: 2~18GHz
- Launching mode: vertical launching from vehicle



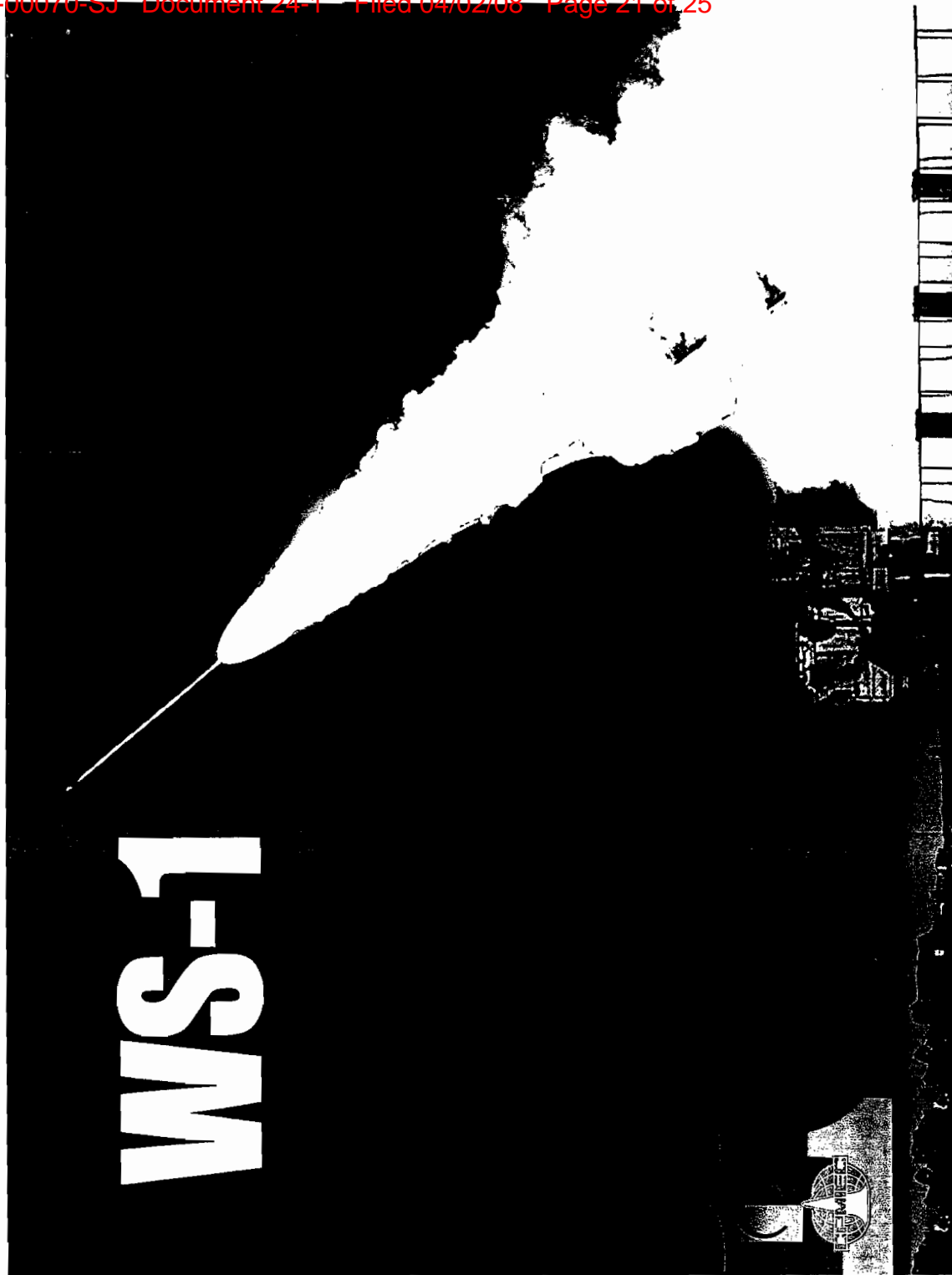
CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO.30, Haidian Nanlu, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891

FAX: (8610) 68748844

<http://www.cpmiec.com.cn>



WS-1 MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)

The WS-1 Multiple Launch Rocket System (MLRS) is an advanced free rocket system characterized by long range, fast reaction, high accuracy and low cost. The rocket can complete battle mission in a battery unit or with a single launching truck, and attack hostile targets far behind front lines with maximum efficiency. It is mainly used to make a destructive attack on enemy's military bases, massive armored troops and other important facilities.

1. Leading features

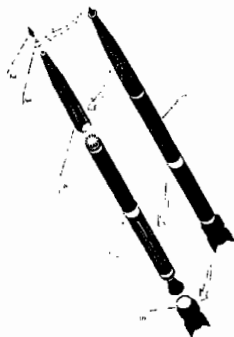
- High maneuverability
- Short reaction time
- Easy operation
- High safety
- High reliability

2. Composition

- Free rockets
- Command truck
- Launching trucks
- Transport&loading trucks

3. Main tactical and technical specifications

	WS-1	WS-1B
System reaction time:	20min.	
Number of launch tubes	4	
Launch mode:	Salvo or single shot	
Firing range:	40 ~ 100km	60 ~ 180km
Max. flight altitude:	40km	60km
Max. velocity:	Ma 4.2	Ma 5.0
Max. acceleration:	50g	55g
Length of rocket:	4.732mm	6.376mm
Diameter of rocket:	302mm	
Take-off weight:	524kg	735kg
Weight of warhead		150kg
Error of probability:	1%	1% ~ 1.25%



1. WS-1 rocket 2. Fuse 3. Drag ring 4. Warhead
5. Solid propellant rocket motor 6. Tail section



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION
ADD: NO. 30, Haidian Nanlu, Beijing, 100080, China
TEL: (8610) 68748877 68748894 68748891 FAX: (8610) 68748844 <http://www.cpmiec.com.cn>



QW-18 MISSILE WEAPON SYSTEM

The QW-18 is a portable air-defense weapon system with anti-infrared jamming capability omnidirectionally against low and very low altitude air targets with a flight speed of no more than 300m/s. QW-18 is used for the air defense to the motorized infantry, armed forces, artillery and paratroops, as well as to the important battle field or critical places such as command center, bridge, airport and ferry. QW-18 is capable to integrate with other air defense weapon systems to establish a complete air defense system. It can be extended into air-to-air missile, ship-to-air missile on the small naval vessels and missile-gun air defense weapon system.

1. Leading features

- High capability against IR jamming
- All-weather operation
- Accurate and lethal against air targets
- Omnidirectional interception
- Large attack zone
- Easy operation
- Quick deployment
- Good survivability
- Multi-mission

2. Main tactical and technical performance

- Type of target: Fighter, attacker, bomber, armed helicopter and air-borne transport airplane
- Launch mode: Shoulder-fired
- Mode of attacking targets: Omni-direction, Anti-jamming capability
- Target speed: $\leq 300\text{m/s}$
- Missile speed: 600m/s
- Interception altitude: $10 \sim 4,000\text{m}$
- Lethal slant range: $500 \sim 5,000\text{m}$
- Max. overload: $16g$
- Conversion from matching to operation: $\leq 10\text{s}$
- Self-destruction time: $14 \sim 18\text{s}$
- Total system weight: 18kg
- Launch tube weight: 4kg
- Firing unit weight: 1.7kg
- Operation temperature: $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Shelf life: 10 years



CHINA NATIONAL PRECISION MACHINERY IMPORT & EXPORT CORPORATION

ADD: NO. 30, Haidian Nanlu, Beijing, 100080, China

TEL: (8610) 68748877 68748894 68748891

FAX: (8610) 68748844

http://www.cniec.com.cn

地 址 (Address):	中国北京市海淀区南路30号 No.30, Haidian Nanlu, Beijing, 100080, China
电 话 (Tel):	(8610)68748877 68748894 68748891
传 真 (Fax):	(8610)68748844
邮政编码 (zip code):	100080
电子邮件 (E-mail):	info@cpmiec.com.cn
网 址 (Website):	http://www.cpmiec.com.cn

2006 CPMIEC Copyright reserved